

Caso 4 diferencia de cuadrados

$$\textcircled{1} x^2 - y^2 = (x+y)(x-y)$$

$\downarrow \quad \downarrow$   
 $x \quad y$

$$\textcircled{2} 4a^2 - 9 = (2a+3)(2a-3)$$

$\downarrow \quad \downarrow$   
 $2a \quad 3$

$$\textcircled{3} \frac{1}{4} - 9a^2 = \left(\frac{1}{2} + 3a\right)\left(\frac{1}{2} - 3a\right)$$

$\downarrow \quad \downarrow$   
 $\frac{1}{2} \quad 3a$

$$\textcircled{4} (x+y)^2 - a^2 = ((x+y)+a)((x+y)-a)$$

$\downarrow \quad \downarrow$   
 $(x+y) \quad a$   
 $(x+y+a)(x+y-a)$

$$\textcircled{5} (a-2b)^2 - (x+y)^2 = ((a-2b)+(x+y))((a-2b)-(x+y))$$

$\downarrow \quad \downarrow$   
 $(a-2b) \quad (x+y)$   
 $(a-2b+x+y)(a-2b-x-y)$